

Appendix 12 Aquatic Habitat Assessments

Plan Number	# of pages	Aquatic Habitat Assessments			Specific to the Pilot Project Planning Watershed (Campbell Creek Planning Watershed)		Notes
		Qualitative?	Quantitative?	Spatial?	Other sources of information referenced		
1-15-107 MEN	28 pages - 7 pages of charts/diagrams, 8 pages of maps.	Yes, introduction, overview, methods (habitat, transition survey, salmonid presence, temperature monitoring), results (same categories), discussion and conclusion. For stream classification (Class I/II transition): "CG surveyors used qualitative observations of watercourse conditions such as habitat type, channel width, pool depth, availability of spawning gravels and observed flow." (page 321)	Yes, primarily tables and charts. Values from the tables were referenced in the narrative. One steelhead trout, two coho and seven steelhead redds per mile were recorded in Smith Creek.	Spawning and rearing habitat maps provided	Flosi, G., and F. L. Reynolds. 1998. California Salmonid Stream Habitat Restoration Manual. California Dept. of Fish and Game. Inland Fisheries Division. Hines, D., and J. Ambrose. 2000. Evaluation of Stream Temperatures Based on Observations of Juvenile Coho Salmon in Northern California Streams. Georgia-Pacific West, Inc., Fort Bragg, California. Unpublished Report. National Marine Fisheries Service. 1996. Making Endangered Species Act Determinations of Effect For Individual or Grouped Actions at the Watershed Scale. National Marine Fisheries Service. Environmental and Technical Services Division. Habitat Conservation Branch. Welsh, H., G. Hodgson, and B. Harvey. 2001. Distribution of Juvenile Coho Salmon in Relation to Water Temperatures in Tributaries of the Mattole River, California. US Forest Service, Southwest Research Station, Redwood Sciences Laboratory, Arcata, California 95521. American Journal of Fisheries Management 21: 464-4470, 2001.	All of the discussion of watercourses appears to be within the Campbell Creek Planning Watershed. However, page 329 states: "...Because a full report on Campbell Creek was included in the Simpson Lacey THP, 2014, only CG's Class I/II survey and a brief summary of the habitat downstream of unit H of the THP will be included in the results section of this report." Page 331 discloses: "Due to time and staff constraints, we chose to modify the protocol. To accomplish our goal of sampling at least 50% of the total Class I habitat, we systematically selected stream reaches adjacent to the Dutchman West THP." Class I restorable habitat mapped and discussed.	
1-15-094 MEN	11 pages - 2 pages of text, 9 pages of maps (only 2 of the maps specific to Campbell Creek Planning Watershed)	Referred reader to the "South Fork Ten Mile River and Campbell Creek Aquatic Habitat Assessment" found on pages 336-459 of THP 1-14-126 MEN for a complete assessment.	From the 2012 CDFW South Fork Ten Mile River Stream Inventory Report provided: riffle, flatwater and pool mean widths and depths in feet in a table. Referred reader to Addendum 1 of the "South Fork Ten Mile River and Campbell Creek Aquatic Habitat Assessment" in THP 1-14-126 MEN. Addendum 1 is the CDFW 2012 South Fork Ten Mile River Stream Inventory Report (for 106,178 feet of stream).	Spawning and rearing habitat maps provided (only 2 of the 8 maps were in the Campbell Creek Planning Watershed).	California Department of Fish and Wildlife Stream Inventory Report for the South Fork Ten Mile River. 2012 (available as Appendix 1 in the "South Fork Ten Mile River and Campbell Creek Aquatic Habitat Assessment" (pages 375-416 THP 1-14-126 MEN). The Aquatic Habitat Assessment from THP 1-14-126 MEN (pages 336-459 in that plan). The California Salmonid Stream Restoration Manual.	Study area mapped in the THP includes Campbell Creek, Little Valley Creek, and Ingleshook Creek Planning Watersheds. Because of the seven (7) harvest units there were in the Ingleshook Creek Planning Watershed, two were in the Little Valley Creek Planning Watershed and two were in the Campbell Creek Planning Watershed the majority of the page Aquatic Habitat Assessment was specific to areas outside of the Pilot Project area.	
1-14-126 MEN	124 pages - 13 pages of text, 5 pages of figures, 17 pages of maps, 41 pages of CDFW 2012 Stream Inventory Report For South Fork Ten Mile River, 42 pages of CDFW 2012 Stream Inventory Report for Campbell Creek.	Yes, both the plan submitter's document and the attached CDFW 2012 Stream Inventory Reports.	Summaries of data from the 2012 CDFW South Fork Ten Mile River and Campbell Creek Stream Inventory Reports supplemented with summaries from work the plan submitter performed.	Spawning and rearing habitat maps provided	CDFW 2012 Stream Inventory Reports for South Fork Ten Mile River and Campbell Creek. Flosi, G., and F. L. Reynolds. 1998. California Salmonid Stream Habitat Restoration Manual. California Dept. of Fish and Game. Inland Fisheries Division. Hines, D., and J. Ambrose. 2000. Evaluation of Stream Temperatures Based on Observations of Juvenile Coho Salmon in Northern California Streams. Georgia-Pacific West, Inc., Fort Bragg, California. Unpublished Report. National Marine Fisheries Service. 1996. Making Endangered Species Act Determinations of Effect For Individual or Grouped Actions at the Watershed Scale. National Marine Fisheries Service. Environmental and Technical Services Division. Habitat Conservation Branch. Welsh, H., G. Hodgson, and B. Harvey. 2001. Distribution of Juvenile Coho Salmon in Relation to Water Temperatures in Tributaries of the Mattole River, California. US Forest Service, Southwest Research Station, Redwood Sciences Laboratory, Arcata, California 95521. American Journal of Fisheries Management 21: 464-4470, 2001.	Watershed Assessment Area is mapped, map included near front of Section IV. - Note: Assessment Area is the Campbell AND Churchman Creek Planning Watersheds. Most of the CDFW 2012 South Fork Ten Mile River Stream Inventory Report covers that part of the South Fork that is within Churchman Creek Planning Watershed (maybe 20% is in the Campbell Creek Planning Watershed).	
1-13-021 MEN	127 pages - 16 pages of text, 5 pages of figures, 25 pages of maps, 34 pages of Draft CDFW 2012 Stream Inventory Report for Smith Creek, 34 pages of 2012 Stream Inventory Report for Mill Creek (outside of Pilot Project area)	Yes, both the plan submitter's document and the attached CDFW 2012 Stream Inventory Reports.	Summaries of data from the 2012 CDFW Draft Smith Creek Stream Inventory Report (and the Mill Creek Stream Inventory Report - outside of Pilot Project area) and assessment from THP 1-07-036 MEN.	Spawning and rearing habitat maps provided	CDFW 2012 Stream Inventory Reports for Smith Creek and Mill Creek (outside of Pilot Project area). Flosi, G., and F. L. Reynolds. 1998. California Salmonid Stream Habitat Restoration Manual. California Dept. of Fish and Game. Inland Fisheries Division. Hines, D., and J. Ambrose. 2000. Evaluation of Stream Temperatures Based on Observations of Juvenile Coho Salmon in Northern California Streams. Georgia-Pacific West, Inc., Fort Bragg, California. Unpublished Report. National Marine Fisheries Service. 1996. Making Endangered Species Act Determinations of Effect For Individual or Grouped Actions at the Watershed Scale. National Marine Fisheries Service. Environmental and Technical Services Division. Habitat Conservation Branch. Welsh, H., G. Hodgson, and B. Harvey. 2001. Distribution of Juvenile Coho Salmon in Relation to Water Temperatures in Tributaries of the Mattole River, California. US Forest Service, Southwest Research Station, Redwood Sciences Laboratory, Arcata, California 95521. American Journal of Fisheries Management 21: 464-4470, 2001.	Smith Creek in the Campbell Creek Planning Watershed and Mill Creek in the Mill Valley Creek Planning Watershed. 2012 CDFW Stream Survey Reports mentioned. Conclusion (page 497-498): "... Structural pool complexity and LWD loading were found to be less than ideal in both creeks, and LWD introduction was recommended in both CDFW 2012 Habitat Inventory Reports ..."	
1-10-033 MEN	14 pages - 6 pages of text, 4 pages of figures, 1 page map.	Yes	Yes	Map only identified Anadros fish habitat (no spawning or rearing)	Flosi, G., and F. L. Reynolds. 1998. California Salmonid Stream Habitat Restoration Manual. California Dept. of Fish and Game. Inland Fisheries Division. Hines, D., and J. Ambrose. 2000. Evaluation of Stream Temperatures Based on Observations of Juvenile Coho Salmon in Northern California Streams. Georgia-Pacific West, Inc., Fort Bragg, California. Unpublished Report. National Marine Fisheries Service. 1996. Making Endangered Species Act Determinations of Effect For Individual or Grouped Actions at the Watershed Scale. National Marine Fisheries Service. Environmental and Technical Services Division. Habitat Conservation Branch. Sullivan, K., D.J. Martin, R.D. Cardwell, J.E. Toll, and S. Duke 2000. An analysis of the effects of temperature on salmonids in the Pacific Northwest with implications for selecting temperature criteria. Sustainable Ecosystems Institute, Portland Oregon. Welsh, H., G. Hodgson, and B. Harvey. 2001. Distribution of Juvenile Coho Salmon in Relation to Water Temperatures in Tributaries of the Mattole River, California. US Forest Service, Southwest Research Station, Redwood Sciences Laboratory, Arcata, California 95521. American Journal of Fisheries Management 21: 464-4470, 2001.	Assessment Area is the Campbell Creek AND Little Valley Creek Planning Watersheds.	
1-09-022 MEN	22 pages - 3 pages of text, no figures, 19 pages of maps	Yes, but mainly referenced Aquatic Habitat Assessments in THPs 1-08-015 MEN and 1-08-127 MEN (not in the Pilot Project Planning Watershed)	Not directly, referenced Aquatic Habitat Assessments in THPs 1-08-015 MEN and 1-08-127 MEN (not in the Pilot Project Planning Watershed)	Spawning and rearing habitat maps provided (9 of the 17 maps were in the Campbell Creek Planning Watershed, others in Churchman Creek).	Referenced Aquatic Habitat Assessments in THPs 1-08-015 MEN and 1-08-127 MEN (not in the Pilot Project Planning Watershed).	Plan area is the Campbell AND Churchman Creek Planning Watersheds.	
1-08-015 MEN	32 pages - 10 pages of text, 4 pages of figures, 14 pages of maps.	Yes, introduction, overview, methods (habitat, transition survey, salmonid presence, temperature monitoring), results (same categories), discussion and conclusion.	Yes, primarily tables and charts. Values from the tables were referenced in the narrative.	Spawning and rearing habitat maps provided	Coey, Robert. 2000 Recommended Actions to Benefit Salmon and Steelhead. Adapted from California Salmonid Stream Habitat Restoration Manual. California Dept of Fish and Game. July 2002 Review Draft. Flosi, G., and F. L. Reynolds. 1998. California Salmonid Stream Habitat Restoration Manual. California Dept. of Fish and Game. Inland Fisheries Division. Georgia Pacific. 1995. Habitat Typing Report: Bald Hill Creek Watershed, North Fork Ten Mile River Basin. Georgia Pacific, Ft. Bragg, CA. Hines, D and J. Ambrose. 2000. Evaluation of Stream Temperatures Based on Observations of Juvenile Coho Salmon in Northern California Streams. Georgia-Pacific West, Inc., Fort Bragg, California. Unpublished Report. National Marine Fisheries Service. 1996. Making Endangered Species Act Determinations of Effect For Individual or Grouped Actions at the Watershed Scale. National Marine Fisheries Service. Environmental and Technical Services Division. Habitat Conservation Branch. Sullivan, K., D.J. Martin, R.D. Cardwell, J.E. Toll, and S. Duke. 2000. An analysis of the effects of temperature on salmonids in the Pacific Northwest with implications for selecting temperature criteria. Sustainable Ecosystems Institute, Portland Oregon. United States. Department of Interior. US Geological Survey. Surface Water Data For Nation. http://waterdata.usgs.gov/nwis/lw Welsh, H., G. Hodgson, and B. Harvey. 2001. Distribution of Juvenile Coho Salmon in Relation to Water Temperatures in Tributaries of the Mattole River, California. US Forest Service, Southwest Research Station, Redwood Sciences Laboratory, Arcata, California 95521. American Journal of Fisheries Management 21: 464-4470, 2001.	Assessment Area is the Campbell Creek Planning Watershed.	
1-07-036 MEN	37 pages - 12 pages text, 5 pages of figures, 17 maps (only about half for Campbell Creek Planning Watershed)	Yes, introduction, overview, methods (habitat, transition survey, salmonid presence, temperature monitoring), results (same categories), discussion and conclusion.	Yes, primarily tables and charts. Values from the tables were referenced in the narrative.	Spawning and rearing habitat maps provided	Flosi, G., and F. L. Reynolds. 1998. California Salmonid Stream Habitat Restoration Manual. California Dept. of Fish and Game. Inland Fisheries Division. Hines, D., and J. Ambrose. 2000. Evaluation of Stream Temperatures Based on Observations of Juvenile Coho Salmon in Northern California Streams. Georgia-Pacific West, Inc., Fort Bragg, California. Unpublished Report. National Marine Fisheries Service. 1996. Making Endangered Species Act Determinations of Effect For Individual or Grouped Actions at the Watershed Scale. National Marine Fisheries Service. Environmental and Technical Services Division. Habitat Conservation Branch. Sullivan, K., D.J. Martin, R.D. Cardwell, J.E. Toll, and S. Duke 2000. An analysis of the effects of temperature on salmonids in the Pacific Northwest with implications for selecting temperature criteria. Sustainable Ecosystems Institute, Portland Oregon. Welsh, H., G. Hodgson, and B. Harvey. 2001. Distribution of Juvenile Coho Salmon in Relation to Water Temperatures in Tributaries of the Mattole River, California. US Forest Service, Southwest Research Station, Redwood Sciences Laboratory, Arcata, California 95521. American Journal of Fisheries Management 21: 464-4470, 2001.	Assessment Area is the Campbell Creek AND Mill Valley Creek Planning Watersheds. (About half of the Aquatic Habitat Assessment was specific to areas outside of the Pilot Project area.)	

Appendix 12 Aquatic Habitat Assessments (Sheet 2 of 2)

note: color is used to highlight each plan, some are in more than one drainage and associated with different surveys.

Plan Number	How much stream was surveyed? And when?	Catchment area	Survey level	Are there previous surveys?	Were charts and/or graphs provided? Row data?	Channel Type	Riffle	Flattener	Number of pools surveyed	Pools	Dry	Stream Channel Category	Pool Habitat Embedment	LWD	Mean Shelter Rating	Bank Stability	Salmonid Presence	Temperature	NOTES	
1-15-107 MEN (Smith Creek)	1,059 feet of habitat of upper Smith Creek. March 2015	1,500 acres for the entire Smith Creek drainage.	Level I but with modified protocol	No. CDFW 2012 habitat inventory survey in Smith Creek was incomplete and did not extend into area adjacent to THP.	Yes, charts and graphs. No row data.	F4, gravel dominated channel type characterized by low gradient riffle/pool habitat.	Mean width 4.8 feet, Mean depth 0.2 feet, comprised 23% of total length.	Mean width 3.3 feet, Mean depth 0.2 feet, comprised 21% of total length.	13	Mean width 6.8 feet, Mean depth 1.0 feet, comprised 28% of total length. Max depth less than 1 foot, 77% between one and two feet and 15% between two and three feet, none over three feet.	4% of units were dry.	0% open, 0% confusable species and 7% brookstick species	0% had Value 1, 61% were Value 2, 31% were Value 3 and 0% were Value 4, 0% were Value 5.	10 pieces of non-lay LWD, 30 pieces of lay LWD per 1000 feet.	74	83% of units had completely stable banks, 17% were considered unstable.	One steelhead trout, 2 coho roach and 7 steelhead roach per mile prior to April 6th.	57141 data from 2006, 2008, 2009, 2010, MWAT 11, 11% in 2010 to 14.0°C in 2006. Temperature generally below 14.0°C at monitoring points.		
1-15-107 MEN (Unnamed Tributary A in Upper Campbell Creek)	628 feet in Unnamed Tributary A in Upper Campbell Creek. March 2015	200 acres	Level I but with modified protocol	No	Yes, charts and graphs. No row data.	G4	Mean width 4.5 feet, Mean depth 0.3 feet, comprised 23% of total length.	Mean width 5.2 feet, Mean depth 0.5 feet, comprised 41% of total length.	9	Mean width 3.8 feet, Mean depth 0.3 feet, comprised 22% of total length. 80% max depth less than 1 foot, 1% between one and two feet, none over two feet.	40% of units were dry.	7% open, 53% confusable species and 0% brookstick species	0% had Value 1, 13% were Value 2, 52% were Value 3 and 33% were Value 4, 0% were Value 5.	35 pieces of non-lay LWD, 19 pieces of lay LWD per 1000 feet.	69	29% of units had completely stable banks, 71% were considered unstable.	No fish.	850 feet of habitat were upgraded to Class I as a result of the survey.		
1-15-107 MEN (Campbell Creek)	106,178 feet of riparian reach of Campbell Creek. March 2012	2,800 acres	Level I but with modified protocol	Yes, CDFW 2012 habitat inventory survey in Campbell Creek, inclusive of the area adjacent to the THP. This data was analyzed as a 1-14-126 MEN Aquatic Assessment - refer to that report for a complete assessment of the fish bearing reaches of Campbell Creek.	Referenced THP 1-14-126 MEN. Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referable habitat, 800 feet upstream of Unnamed Tributary A. 8 foot waterfall not fish passable. Marsh above waterfall, 636 rft. 9% flatwater, 44% pool and 54% dry. Because these upper reaches do not support fish at this time, an analysis of aquatic habitat not included. Class I/II transition was moved upstream from the North and South Branch Campbell Creek.
1-15-107 MEN (Class I/II Restorable habitat in upper Campbell Creek downstream of Unit H)	Not stated, March 2015	Not stated.	Level I but with modified protocol	No	No charts, graphs or row data.	G3	Mean width 6.9 feet, Mean depth 0.3 feet, measured in every 100th unit.	Mean width 11.8 feet, Mean depth 0.5 feet, measured in every 100th unit.	No data provided.	Mean width 18.0 feet, Mean depth 1.0 feet, measured in every 100th unit.	14%	No data provided.	No data provided.	No data provided.	No data provided.	No data provided.	No fish.	No data provided.	Because do not support fish an analysis of aquatic habitat not included.	
1-15-094 MEN	None, referenced surveys summarized in other habitat plan.	Not stated.	N/A	CDFW 2012 South Fork Ten Mile River Stream Inventory Report for 106,178 feet of stream. Copy found in THP 1-14-126 MEN.	No charts, graphs or row data.	Referenced THP 1-14-126 MEN.	Mean width 9.9 feet, Mean depth 0.3 feet, measured in every 100th unit.	Mean width 11.8 feet, Mean depth 0.5 feet, measured in every 100th unit.	No data provided.	Mean width 18.0 feet, Mean depth 1.0 feet, measured in every 100th unit.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Referenced THP 1-14-126 MEN.	Except for the riffle, flatwater and pool table this plan just directed the reader to the Aquatic Habitat Assessment from THP 1-14-126 MEN for further information.	
1-14-126 MEN (South Fork Ten Mile River)	106,178 feet. CDFW 2012, plan submitted - since 1993 for aquatic vertebrates, 2014-2014 waterway survey since 1994 temperature.	25,000 acres reach of the Ten Mile River. (See Aquatic Habitat Planning Worksheet)	Not discussed.	The CDFW 2012 survey.	Yes, charts and graphs. No row data. Also provided, 10 page 2012 CDFW Stream Inventory Report for South Fork Ten Mile River (see Addendum 2).	F4 Rogen channel type, generally gravel dominant, low gradient, meandering riffle/pool habitats with moderate entrenchment.	Mean width 9.9 feet, Mean depth 0.3 feet, measured in every 100th unit, comprised 20.2% of total length.	Mean width 11.8 feet, Mean depth 0.5 feet, measured in every 100th unit, comprised 23.8% of total length.	608	Mean width 18.0 feet, Mean depth 1.0 feet, measured in every 100th unit, comprised 45.2% of total length. 1% max depth less than 1 foot, 83% between one and two feet and 13% between two and three feet, 2% between three and four feet and 3% greater than four feet.	0.8% of units were dry.	10.1% open, 30.0% confusable species and 0.9% brookstick species	45.4% were Value 1, 31.2% were Value 2, 1.2% were Value 3 and 0% were Value 4 or 5.	The dominant cover type, measured in pools, was Large Woody Debris, at 30.9%, 2007-2008 there was a large scale LWD placement project in much of the South Fork Ten Mile River.	32	Not reported.	Steelhead trout and coho-detect, 7.2 coho roach and 1.0 steelhead roach per mile in reach 1 in 2012; 1.0 coho roach per mile in reach 2 in 2014 and 0.0 coho roach per mile in reach 3 in 2014. (Reach 2 and 3 do not appear to be mapped)	5713 and 5726 data from 1994-2001, 2003, 2005, 2007-2013; MWAT 12, 1% at 5726 to 2006 to 17.1°C at SFTI in 1995-9, 1997. Temperature generally below 17.0°C at all monitoring points. 21 in 2014. (Reach 2 and 3 do not appear to be mapped)	These values are not appropriate for the River Project. They are confined to the Campbell Creek Planning Watershed and these numbers are the length of the South Fork Ten Mile which is primarily within the Churnman Creek Watershed. The numbers were pulled out of the CDFW stream inventory report and do not represent information found in other data sources (excluding Churnman Creek Planning Worksheet).	
1-15-107 MEN (Campbell Creek)	25,700 feet. CDFW 2012, plan submitted - since 1993 electrofishing, 2012-2014 spawner survey; since 1994 temperature.	2,800 acres.	Varied by what was surveyed.	The CDFW 2012 survey.	Yes, charts and graphs. No row data. Also provided, 10 page 2012 CDFW Stream Inventory Report for Campbell Creek (see Addendum 2).	F4 except a small section of CA adjacent to unit D. Both are gravel dominant, low gradient, meandering riffle/pool habitats.	Mean width 8.7 feet, Mean depth 0.2 feet, measured in every 100th unit, comprised 24.1% of total length.	Mean width 11.8 feet, Mean depth 0.5 feet, measured in every 100th unit, comprised 27.9% of total length.	383	Mean width 17.7 feet, Mean depth 0.7 feet, measured in every 100th unit, comprised 47% of total length. 4% max depth less than 1 foot, 59% between one and two feet and 25% between two and three feet, 4% between three and four feet and 1% greater than four feet (one pool).	5.2% open, 47.9% confusable species and 46.9% brookstick species	61.3% had Value 1, 31.9% were Value 2, 5.2% were Value 3 and 0% were Value 4 or 5 (unavailable for spawning).	The dominant cover type, measured in pools, was Large Woody Debris at 44.9%, 75 pieces of small category LWD and 1.8% were Value 5 (unavailable for spawning) LWD per thousand stream feet.	11	Not reported.	Steelhead trout and coho-detect, 0.3 coho roach and 2.7 steelhead roach per mile in reach 1 in 2012. (Reach 2 and 3 do not appear to be mapped)	5722 data from 1994-2001, 2003, 2005, 2007-2013; MWAT 12, 1% at 5726 to 2006 to 15.1°C at SFTI in 1997. Temperature generally below 17.0°C at all monitoring points.	Most of these numbers were pulled out of the CDFW stream inventory report and do not represent information found in other data sources (excluding CDFW Stream Survey).		
1-15-031 MEN (part the part within Smith Creek)	20,073 feet. CDFW 2012, plan submitted - electrofishing by plan submitter 1993-2011 in lower Smith Creek, spawner survey 2011, 2012-2013 season. Temperature 1994-2003 at SFTI, 2006 and 2008-2010 at SFTI4.	1,500 acres.	Level IV for the CDFW survey.	"... During the summer and fall of 2012... CDFW conducted habitat inventory surveys in both MI and Smith Creek, which were inclusive of the area adjacent to the Plan." page 4B3 Assessment of North Fork Smith Creek, not part of CDFW survey, for THP 1-07-036 MEN.	Yes, charts and graphs. No row data. Also provided, 10 page 2012 CDFW Stream Inventory Report for Smith Creek.	F4, low gradient, well entrenched riffle/pool habitat, 84.1% in gradient increases.	Mean width 8.1 feet, Mean depth 0.2 feet, measured in every 100th unit, comprised 13.3% of total length.	Mean width 11.8 feet, Mean depth 0.5 feet, measured in every 100th unit, comprised 16.9% of total length.	267	Mean width 17.7 feet, Mean depth 0.7 feet, measured in every 100th unit, comprised 49.0% of total length. 0.1% max depth less than 1 foot, 59% between one and two feet and 23% between two and three feet, 4% between three and four feet and 1% greater than four feet.	Not stated. How many of the units were dry.	6.6% open, 40.3% confusable species and 53.1% brookstick species	97.0% had Value 2, 3.0% were Value 3, none were Value 5 (unavailable for spawning).	The dominant cover type, measured in pools, was Small Woody Debris, at 33.4%, Large Woody Debris comprised 31.3%.	33	Not reported.	Steelhead of all ages detected, coho young of year observed up to 17.418 feet from confluence with South Fork Ten Mile River. No spawners or roach observed in Middle Smith Creek reach adjacent to THP 1-031-2013. Part of this reach, below 15.0°C for more than 85% of the data points, was observed.	SFTI data from 1994-2001, MWAT 12, 1% at 5726 to 2006 to 12.9°C in 2009 and 2010 to 15.1°C at SFTI in 1997. SFTI4 data, MWAT 12, 1% at 5726 to 2006 to 14.8°C in 2006. Temperature below 15.0°C for more than 85% of the data points.	Approximately half of the report was for MI Creek, which is part of the Campbell Creek Planning Watershed. Class I/II transition was moved 1,200 feet upstream in mission Smith Creek, the last 800 feet Class I restorable (above a LWD barrier). Class I/II transition was moved 300 feet upstream in Gully A. (80% range of aquatic, 380 acres, Class I/II transition was moved 1,500 feet upstream on the North Fork Smith Creek. Class I/II transition was moved 200 feet upstream on an unnamed tributary to the North Fork Smith Creek. The last 160 feet Class I restorable (above a LWD barrier).	
1-10-033 MEN (part the part on the South Fork Ten Mile River within the Campbell Creek Planning Watershed)	1,035 feet (~30% of Class I stream within the Campbell Creek Planning Watershed) February 2009	25,000 acres	Level I, but "... Due to the length of stream requiring surveying... we divided the segment... into 30 reaches... selected one... in order to sample at least 30% of the total stream distance."	No, or none mentioned	Yes, charts and graphs. No row data.	E5	Mean width 8.7 feet, Mean depth 0.2 feet, measured in 100% of units, comprised 10% of total length.	Mean width 8.0 feet, Mean depth 0.7 feet, measured in 100% of units, comprised 30% of total length.	6	Mean width 17.5 feet, Mean depth 0.8 feet, measured in 100% of units, comprised 10% of total length. 0% max depth less than 1 foot, 10% between one and two feet and 50% between two and three feet, 17% between three and four feet, and 17% greater than four feet. 34% were considered to be primary pools.	2% open, 0% confusable species and 98% brookstick species	83% had Value 1, 17% were Value 2, 0% were Value 3 and 0% were Value 4 or 5 (unavailable for spawning).	17 pieces LWD greater than 20 feet long per 1,000 feet and 27 pieces of LWD less than 20 feet long per 1,000 feet.	178	0% of units had banks that were considered to be unstable (intermittently and seasonally).	Present - monitored site three miles or more downstream, both coho (intermittently) and steelhead.	SFTI 9 data from 2007-2009, MWAT 13, 1% at 2010 to 15.1°C at SFTI in 2009 to 15.1°C at SFTI in 2009. Part of this plan area is a different Planning Watershed.			
1-09-022 MEN (part the part that drains to Campbell Creek)	Just a reconnaissance survey (Class I/II transition) in the unnamed tributaries to Campbell Creek. 2008	88 and 60 acres	Reconnaissance to verify terminus of Class I habitat only.	Survey of Campbell Creek in 2007, plan refers reader to Aquatic Habitat Assessment in THP 1-08-015 MEN for Campbell Creek info.	No charts, graphs or row data. (See Aquatic Habitat Assessment in THP 1-08-015 MEN for Campbell Creek info)	Not stated. (See Aquatic Habitat Assessment in THP 1-08-015 MEN for Campbell Creek info)	Mean width 8.1 feet, Mean depth 0.2 feet, measured in 100% of units, comprised 10% of total length.	Mean width 11.8 feet, Mean depth 0.5 feet, measured in 100% of units, comprised 30% of total length.	(See Aquatic Habitat Assessment in THP 1-08-015 MEN for Campbell Creek info)	(See Aquatic Habitat Assessment in THP 1-08-015 MEN for Campbell Creek info)	(See Aquatic Habitat Assessment in THP 1-08-015 MEN for Campbell Creek info)	(See Aquatic Habitat Assessment in THP 1-08-015 MEN for Campbell Creek info)	(See Aquatic Habitat Assessment in THP 1-08-015 MEN for Campbell Creek info)	(See Aquatic Habitat Assessment in THP 1-08-015 MEN for Campbell Creek info)	(See Aquatic Habitat Assessment in THP 1-08-015 MEN for Campbell Creek info)	(See Aquatic Habitat Assessment in THP 1-08-015 MEN for Campbell Creek info)	(See Aquatic Habitat Assessment in THP 1-08-015 MEN for Campbell Creek info)	(See Aquatic Habitat Assessment in THP 1-08-015 MEN for Campbell Creek info)	No evidence of salmonid presence observed. (See Aquatic Habitat Assessment in THP 1-08-015 MEN for Campbell Creek info)	
1-08-015 MEN (Campbell Creek)	4,500 feet of approximately 15,000 feet of Campbell Creek. April 2007	2,700 acres	Level I, but "... Due to the length of stream requiring surveying... we divided the segment... into 30 reaches... selected 2... to achieve our goal of sampling at least 30% of the total stream distance..." Portions of the main stem South Fork River and Smith Creek adjacent to some harvest units are not within the plan submitters property and therefore were not surveyed.	No, or none mentioned	Yes, charts and graphs. No row data.	B4, moderately entrenched predominantly gravel characterized by a moderate gradient, dominant riffle and infrequently spaced pools.	Mean width 8.1 feet, Mean depth 0.2 feet, measured in 100% of units, comprised 10% of total length.	Mean width 8.4 feet, Mean depth 0.5 feet, measured in 100% of units, comprised 30% of total length.	32	Mean width 11.3 feet, Mean depth 0.7 feet, measured in 100% of units, comprised 25% of total length. 0% max depth less than 1 foot, 69% between one and two feet and 20% between two and three feet, 4% between three and four feet, 0% were considered to be primary pools.	0%	86% closed with 38% confusable species and 48% brookstick species.	3% had Value 1, 59% were Value 2, 0% were Value 3 and 3% were Value 5 (unavailable for spawning).	52 pieces of LWD per 1000 feet.	56% of units had completely stable banks, 44% that were at least partly unstable.	Steelhead detected (0.47 fish/meter) in all 12 years of monitoring at SFTI. Coho detected (0.20 fish per meter) in 1995-1997, 1999, 2000 and 2006.	SFTI data from 1994-2003, MWAT 13, 1% at 2010 to 15.1°C at SFTI in 2009 to 15.1°C at SFTI in 2009. Part of this plan area is a different Planning Watershed.			
1-07-036 MEN (Smith Creek)	2,000 feet. June 2006. Temperature and aquatic vertebrates monitored at SFTI intermittently since 1994.	3,224 acres	Level I, but "... Due to the length of stream requiring surveying... we divided the segment... into 30 reaches... approximately 1,200 feet in length... 7 survey reaches to attain our goal of sampling at least 30% of the total stream distance..." only segments 5 and 6 on Smith Creek.	None mentioned other than temperature and aquatic vertebrate monitoring at SFTI since 1994.	Yes, charts and graphs. No row data.	F3 Riffle/pool dominated stream channels, entrenched, cobble dominated channel	Mean width 6.2 feet, Mean depth 0.2 feet, measured in 100% of units, comprised 22% of total length.	Mean width 7.9 feet, Mean depth 0.4 feet, measured in 100% of units, comprised 21% of total length.	13	Mean width 11.3 feet, Mean depth 0.7 feet, measured in 100% of units, comprised 23% of total length. 0% max depth less than 1 foot, 38% between one and two feet, 40% between two and three feet, none greater than three feet.	90% closed with 22% confusable species and 74% brookstick species	15% had Value 1, 54% had Value 2, 15% were Value 3, 20% were Value 4 and 0% were Value 5 (unavailable for spawning).	93 pieces of LWD per 1000 feet.	71% of units had completely stable banks, 29% that were at least partly unstable.	Steelhead 0.28 fish/meter detected in all years of monitoring at SFTI. Coho detected (0.07 fish per meter) in 1995-1997, 2000, 2003 and 2005. Radio through survey reach in Smith Creek.	SFTI data from 1994-2003, MWAT 13, 1% at 2010 to 15.1°C at SFTI in 2009 to 15.1°C at SFTI in 2009. Part of this plan area is a different Planning Watershed and not summarized on the spreadsheet.				
1-07-036 MEN (North Fork Smith Creek)	1,000 feet. June 2006. Temperature and aquatic vertebrates monitored at SFTI intermittently since 1994.	1,224 acres (Entire Smith Creek drainage)	Level I, but "... Due to the length of stream requiring surveying... we divided the segment... into 30 reaches... approximately 1,200 feet in length... 7 survey reaches to attain our goal of sampling at least 30% of the total stream distance..." only segment 7 on North Fork Smith Creek.	None mentioned other than temperature and aquatic vertebrate monitoring at SFTI since 1994. (Note: more than a mile downstream of the North Fork Smith Creek.)	Yes, charts and graphs. No row data.	Not specifically addressed, Smith Creek was F3.	Mean width 5.1 feet, Mean depth 0.3 feet, measured in 100% of units, comprised 41% of total length.	Mean width 4.8 feet, Mean depth 0.4 feet, measured in 100% of units, comprised 34% of total length.	5	Mean width 5.4 feet, Mean depth 0.9 feet, measured in 100% of units, comprised 11% of total length. 20% max depth less than 1 foot, 60% between one and two feet, 20% between two and three feet, no pool was greater than 3 feet.	0%	68% closed with 66% confusable species and 12% brookstick species	20% had Value 2, 80% were Value 3.	36 pieces of LWD per 1000 feet.	48% of units had completely stable banks, 52% that were at least partly unstable.	Nothing specific for North Fork Smith Creek see Smith Creek above.	More than half of this Aquatic Habitat Assessment was about MI Creek, located at a different Planning Watershed and not summarized on the spreadsheet.			